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Attorney Docket No. JEFF-YOO01

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Yoon  
Serial No.: 09/473,872  
Filed: December 28, 1999  
For: Novel Gene Therapy Methods for the Treatment of Skin Disorders

Group Art Unit No.: 1632  
Examiner: Voitach, J.

**RECEIVED**

MAY 10 2002

Commissioner for Patents  
Washington, D.C. 20231

TECH CENTER 1600/2900

**AMENDMENT AND RESPONSE UNDER 37 C.F.R. §1.111**

Sir:

This Amendment is responsive to the Office Action dated December 6, 2001 (Paper No. 17) (herein referred to as "Office Action").

The Commissioner is hereby authorized to charge any fees which may be required by this paper to Deposit Account No. 18-0586.

**In The Claims:**

*Sub 1*  
1. (Thrice Amended) A method of modifying a selected gene in cells of a human skin in vivo which comprises delivering to said cells at one or more locations of the human skin an effective amount of a composition comprising a chimeric RNA-DNA oligonucleotide having a double hairpin structure with pyrimidine loops and a pharmaceutically acceptable carrier such that stable genetic modifications are made to the selected gene which result in phenotypic changes at said locations of the human skin.

*Sub 32*  
32. (Twice Amended) A non-human animal model having a skin disorder at one or more locations of its skin wherein the skin disorder is a result of a treatment at said locations with a composition comprising a chimeric RNA-DNA oligonucleotide having a double hairpin structure with pyrimidine loops targeted to a selected skin gene, said oligonucleotide thereby